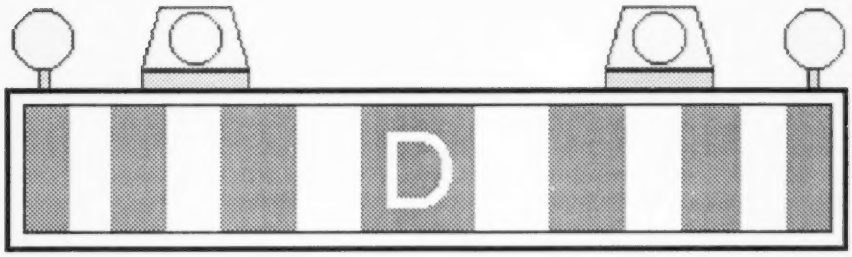
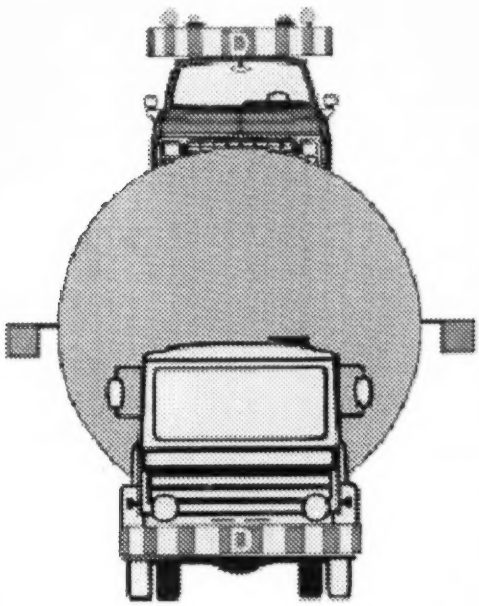
DRAFT for Discussion

Canadian Escort Vehicle Drivers' Handbook





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Introduction

As the driver of an escort vehicle, you are part of a team doing the important job of safely moving overdimensional loads on the public highways.

You carry much of the responsibility for protecting the public, a valuable load, the load driver and yourself.

Your duties go beyond just carrying an overdimensional sign. At every phase of the movement of an overdimensional load, you will have specific tasks to perform. The success of the trip will depend a lot on your skill, alertness and good judgement.

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1. Driver Requirements for Providing Escort Services

To qualify as an escort vehicle driver you must:

- Be at least 21 years of age
- Have a valid, unrestricted driver's license from the province, territory or state in which you are resident
- Pass the Escort Vehicle Driver's Certification Test in one of the jurisdictions which participates in this program.
- Comply with all terms, conditions, requirements and or regulations set forth by the agency(s) responsible for special permits for movement of overdimensional loads on the routes to be followed during the movement of the load.

2. Certification Program

To be developed

Topics to be covered:

- Where to apply for certification
- Test
- Fee
- Expiration and renewal
- Revocation and suspension

3. Escort Vehicle Specifications and Equipment

a) *Vehicle Requirements*

Vehicles used to provide escort services during the movement of overdimensional loads must:

- have a Gross Vehicle Weight Rating no greater than 6000 kg
- have a maximum of 2 axles
- not carry cargo or tow a trailer. Only equipment and passengers related to the movement of the oversize/overweight load can be carried in the escort vehicle
- have clear rearward visibility from all three mirrors (two exterior, one interior)

Vehicles used for escort services are also subject to annual mechanical fitness inspections.

b) *Equipment Requirements*

Each escort vehicle must be equipped with:

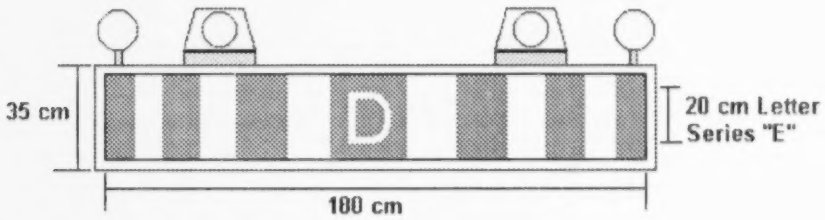
- Three approved warning devices (red flares or lamps, lanterns, reflectors or advance warning triangles)
- Three warning flags for traffic marking
- One warning flag per crew member for flagging
- One reflective vest per crew member
- One flashlight equipped with signal tube per crew member
- An approved warning sign box ("D" Sign) positioned so that it is readily visible to motorists approaching the overdimensional load
- A two-way radio which meets Communications Canada standards

Additional safety equipment such as first aid kits, a fire extinguisher and hard hats are recommended for emergencies.

c) *Warning Sign (Light Box)*

The escort vehicle must be equipped with a lighted sign box which meets the following specifications:

- the sign must be upright when in use, and clearly visible from the front and rear of the vehicle (the sign must be folded flat when not in use or not required, or must be removed from the vehicle)



- Box Dimensions - the box must be 180 centimetres x 35 centimetres x 10 centimetres and constructed of mild steel material with inside and outside surfaces of baked white enamel. The box must shelter all wire connectors, switches, flashers, etc.

- Illumination - A sufficient number of lamps must be mounted in the box and spaced to give even lighting of the sign background across its full width.

- Sign Panel - the sign panel must be 3 millimetres thick, with a white plexi-glass background with red bars painted with transparent red paint. The letter "D" must be white in color and must be 20 centimetres high, Series E.

- Outboard Lights - must consist of two 175-millimetre (minimum) amber lights with reflectors, rated at 12.5 volts, 3 amps and 0.50 candela with a rated life of 300 hours.

- Inboard Lights - must consist of 2 standard 203-millimetre rotating amber lights, with 2 sealed beam units per lamp.

4. Escorting Overdimensional Loads

a) *General Rules of the Road*

Traffic Signals and Signs

The traffic signals and signs, for all drivers must also be obeyed during escort operations. For example, escort drivers are required to stop for red lights and school buses and to drive strictly in accordance with all regulatory signing.

Road Markings

Road markings improve highway safety by providing important traffic control information to motorists. Escort operators should carefully observe all road markings and never drive to the left of a solid double yellow centerline.

Drivers Signals

Escort drivers should give proper signals in advance of turning at intersections or when changing lanes.

Maintain a Safe Following Distance

As a general rule, the two-second rule should be used to assure that a correct following distance is being maintained. To determine if the following distance is proper, the driver should note when the vehicle ahead passes a definite point on the road (such as a tar strip or telephone pole). Then the driver should count "one thousand and one, one thousand and two". If the driver reaches the mark before completing the count, the following distance is too close and a greater Interval is needed. The two-second rule is applicable regardless of vehicle speed. Escort drivers who follow the overdimensional load or other traffic at distances less than a safe distance, are not giving themselves enough time or distance to respond to emergency situations.

Stopping Under Special Conditions

When the driver of the overdimensional load or the escort operator is forced to stop (except momentarily) on any portion of the road, the drivers should immediately set out three warning flares, torches, or reflectorized triangular warning signals to warn approaching traffic of the hazard. Every precaution should be taken to remove the load and escort vehicles from the roadway

Right-Of-Way Rules

Escort drivers are required to obey all right-of-way rules, especially at intersections in urban areas and when entering or leaving an Interstate or other limited access highway. The size of the load is not justification for assuming that other drivers must yield to the load or the escort vehicles.

Defensive Driving

A defensive driver is a person who is always alert, and takes every reasonable precaution to prevent traffic mishaps, over and above what is required by law. Because the movement of every overdimensional load affects the normal flow of traffic on the highway, the escort driver must develop a positive attitude toward accident prevention. A defensive driver must anticipate possible accident problems by evaluating constantly changing situations and planning preventive measures. Escort drivers should consider the "accident prevention formula" which follows:

- *See the hazard*: Think about what is going to happen as far ahead of encountering the situation as possible. Never assume everything will be "all right"
- *Understand the Defense*: There are specific ways of handling specific situations. Learn these ways and be prepared to apply them when the need arises
- *Act in Time*: Once you have perceived the hazard and determined the defense, act immediately. Never take a "wait and see" attitude

b) *General rules for the movement of overdimensional loads*

Before a load which exceeds legal size and weight limits can be transported, the load driver must obtain a special permit from the appropriate authorities. The permit specifies general and specific conditions under which the movement must be made.

1. Permits are not issued to the drivers of escort vehicles but every escort driver must comply with the permit conditions that cover escort operations.
2. Escort vehicles must maintain an adequate distance in front of or behind the unit carrying the load in order to warn approaching vehicles of the overdimensional load.
3. All escort vehicle drivers and the overdimensional load driver must be able to communicate at all times by two-way radio.
4. Overdimensional load movements may not travel in convoy unless special permission has been given to the operators involved in the move. The driver of the towing vehicle should take every opportunity to allow following traffic to pass. If traffic build-up behind the unit becomes heavy, the entire combined unit should move off the travelled portion of the roadway to allow traffic to pass safely.
5. Permission must be obtained from the various road authorities concerned before removing or adjusting bridge railing, or modifying or tampering with traffic control devices or roadway structures.
6. Travel on all highways must be within the right-hand lane with the overhang extending over the shoulder except where there are roadside obstacles. Passing slower vehicles is allowed where this can be done safely.
7. Red or orange flags must be displayed at each of the four corners of the overdimensional load. These must be at least 40 cm x 40 cm (16" x 16") and be in good condition.
8. Vehicle headlights and other non-flashing exterior lights should be turned on during the move, including those of the escort vehicle.
9. Dimensional signs identifying the overdimensional load shall be properly displayed on the transport vehicle and on each escort vehicle.

It is the responsibility of the escort vehicle driver to make the travelling public aware of the presence of an overdimensional load and to warn traffic when necessary.

Escort drivers also help the load driver move the load as safely as possible with the least possible delay and inconvenience to the travelling public.

Depending on the size of the load and the type of highway, either pilot (front) or trail (rear) vehicles, or both, will be required.

c) ***Pre-Trip***

It is important for all members of the team responsible for moving an overdimensional load to check their equipment and to make sure that everyone understands the permit, the route and each person's responsibilities.

Being comfortable and familiar with the escort vehicle is an important factor, and drivers should familiarize themselves with the vehicle's performance and operating characteristics before escorting an overdimensional load.

- Check the permit for any special requirements or instructions.
- Make sure everyone understands the route and directions to be taken.
- Plan ahead; verify any hazards or concerns that may be encountered along the route
- Confirm the load's dimensions before departing to understand the space required for turning and clearances for bridges, tunnels and roadside objects.
- Check all equipment for the escort vehicle(s). The sign should be securely mounted, mirrors adjusted, lights turned on and all safety equipment accounted for.
- Check all radios and select an appropriate two-way channel.

d) ***During the trip***

The safety of the travelling public is of primary importance. Escort drivers must obey all traffic laws and regulations - don't be tempted to assume that other drivers will yield the right of way because of the size of the load.

Alertness will help avoid accidents and may even save lives.

For example: it is easy not to notice pedestrians dressed in dark clothing, or vehicles stopped without lights, on the road ahead, especially during the difficult lighting conditions of dusk or dawn. But with an overdimensional load extending onto the shoulder, failure to warn the load driver in time could mean a tragedy.

If there is any chance that an obstacle ahead could cause problems, notify the load driver immediately. That's your job.

Traffic signals

When travelling a route controlled by traffic lights, care should be taken that stopping for signals does not cause the escorts and load to be widely separated.

If the escort passes through the intersection but the load is required to stop, the escort driver should pull over as soon as possible on the right-hand side of the road and resume travel as the load approaches at the required distance.

When the rear escort is stopped by a red light which has been cleared by the load, the load driver should proceed, and the rear escort driver should catch up to the load as soon as possible.

The escort driver(s) must be alert and avoid sudden stops at traffic signals.

Traffic Build-up

When there are more than three vehicles following the unit, or when following traffic is held up for more than a few minutes, the escort driver(s) should help the load driver find a suitable place

for the vehicles to pull off the travelled portion of the roadway, allowing the traffic to pass safely.

Weigh Scales and Inspection Stations

Escort vehicles must accompany the overdimensional load to weigh scales and inspection stations. Drivers should be prepared for inspection of the escort vehicle, its equipment and confirmation of certification as an escort vehicle driver.

Breakdowns and inclement weather

When inclement weather causes poor visibility and driving conditions, or there are such problems as mechanical breakdowns, a safe place should be found to remove the load from the roadway.

On winding or narrow roads or where obstacles are located near the road, approaching motorists may not be able to see the load clearly until there are very close to it.

In these cases, the escort driver should travel to a point where the escort vehicle can be seen clearly from some distance away, halt and use the stop/slow paddle or flag to warn other drivers they are about to encounter an overdimensional load.

Stopping traffic

When an overdimensional load must use a roadway which is too narrow for two-way traffic, the driver of the escort vehicle must advance to a point where two-way traffic is possible, and stop traffic there using proper flagging procedures.

When the load driver reaches that point, he or she should stop and allow traffic to clear from both directions.

It is important for the safety of all concerned that proper flagging procedures be used.

If a collision occurs

Avoid a second collision by pulling completely off the road. Turn on the vehicle's hazard warning lights and use flares or reflectors to warn approaching traffic of the problem.

If moving off of the roadway is impossible, use flagging to stop or divert traffic.

Get help. Contact the police and an ambulance if anyone has been injured. Do not move an injured person unless he or she is in a burning vehicle or in any other immediate danger.

To reduce fire hazards, turn off the ignition of wrecked vehicle.

e) *Escort Vehicle Driver's Role and Responsibilities*

Front escort (pilot)

The driver of the escort vehicle ahead of the overdimensional load will:

- Warn oncoming traffic an overdimensional load is following, by travelling 300 to 1000 metres ahead of the load and displaying an approved dimensional sign and flashing lights.
- Use a two-way radio to warn the load driver of any potential problems ahead, including hazards, obstructions or pedestrians on the road ahead.

- Make sure the vehicles are following the route specified on the permit.
- Find safe places for the vehicles to pull over in order to allow following traffic to pass safely.
- Warn motorists, using proper flagging procedures, to stop at the entrance to narrow structures and other roadway restrictions to allow safe passage of the load.

Rear escort (trail)

The driver of the escort vehicle following the overdimensional load will:

- Warn traffic approaching from the rear that an overdimensional load is ahead by travelling 100 to 300 metres behind the load and by displaying an approved dimensional sign and flashing lights.
- Use a two-way radio to warn the load driver of flat tires, objects coming loose from the load, defective lights and other potential hazards the driver may not be aware of.
- Notify the load driver of motorists attempting to pass the load.
- Warn motorists, using proper flagging procedures, to stop at the entrance to narrow structures and other roadway restrictions to allow safe passage of the load.

Advance escort vehicle

In cases where the overdimensional load is very large, the special permit may require three pilot vehicles; usually two in the front and one in the rear.

The advance escort vehicle will normally be required to travel well ahead of the overdimensional load to provide advance warning of hazards and to warn and/or control other traffic prior to the arrival of the load.

f) *When the trip is completed*

When the escort operation is over the overdimensional load sign box must be folded down, covered or removed.

5. Flagging

The flag person is responsible for safeguarding the public and the overdimensional load by warning motorists of danger ahead and guiding them safely through the area. Also when necessary a flag person can warn traffic to stop, advise motorists of delays, and keep vehicles in the proper lanes.

You must be alert at all times and always stand while waiting for traffic. You should wear a hard hat, reflective vest, and have a flag or stop/slow paddle.

Procedures

1. Stand far enough ahead of the problem area to give approaching traffic enough distance to reduce speed and come to a stop.
2. Stand facing traffic, where you can see and be seen. Do not stand in the centre of the traffic lane, or in any position where you are liable to be hit by approaching traffic.
3. Your signals must be clear and distinct. Don't make drivers guess what they should do.
4. To warn traffic to stop, hold your flag or paddle in a horizontal position across the path of the vehicle. After the first vehicle has been stopped, move to the centre line so drivers approaching from the rear can readily see you.
5. If time permits, inform drivers of the reason for the delay. Be courteous and brief.
6. To slow traffic, but not to stop it, extend your flag or paddle into the traffic lane, and lower it before the traffic is completely stopped. At the same time, use an up and down waving motion with the left hand, palm down, to emphasize the need for drivers to slow down. Never wave a flag or paddle or use it to signal traffic to move ahead.